



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/930,913	08/15/2001	William J. Braun	24534-080000	1702
7590	01/13/2005		EXAMINER	
Stephen T. Scherrer McDermott, Will & Emery 31st Floor 227 West Monroe Street Chicago, IL 60606			DASS, HARISH T	
			ART UNIT	PAPER NUMBER
			3628	
DATE MAILED: 01/13/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/930,913	BRAUN ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Harish T Dass	3628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 15 August 2001.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-20 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                     | Paper No(s)/Mail Date. _____ .  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: _____ .                                  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 101***

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-15 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

As an initial matter, the United States Constitution under Art. I, §8, cl. 8 gave Congress the power to "[p]romote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries". In carrying out this power, Congress authorized under 35 U.S.C. §101 a grant of a patent to "[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition or matter, or any new and useful improvement thereof." Therefore, a fundamental premise is that a patent is a statutorily created vehicle for Congress to confer an exclusive right to the inventors for "inventions" that promote the progress of "science and the useful arts". The phrase "technological arts" has been created and used by the courts to offer another view of the term "useful arts". See *In re Musgrave*, 167 USPQ (BNA) 280 (CCPA 1970). Hence, the first test of whether an invention is eligible for a patent is to determine if the invention is within the "technological arts".

Further, despite the express language of §101, several judicially created exceptions have been established to exclude certain subject matter as being patentable subject matter covered by §101. These exceptions include "laws of nature", "natural

Art Unit: 3628

phenomena", and "abstract ideas". See *Diamond v. Diehr*, 450, U.S. 175, 185, 209 USPQ (BNA) 1, 7 (1981). However, courts have found that even if an invention incorporates abstract ideas, such as mathematical algorithms, the invention may nevertheless be statutory subject matter if the invention as a whole produces a "useful, concrete and tangible result." See *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* 149 F.3d 1368, 1973, 47 USPQ2d (BNA) 1596 (Fed. Cir. 1998).

This "two prong" test was evident when the Court of Customs and Patent Appeals (CCPA) decided an appeal from the Board of Patent Appeals and Interferences (BPAI). See *In re Toma*, 197 USPQ (BNA) 852 (CCPA 1978). In *Toma*, the court held that the recited mathematical algorithm did not render the claim as a whole non-statutory using the Freeman-Walter-Abele test as applied to *Gottschalk v. Benson*, 409 U.S. 63, 175 USPQ (BNA) 673 (1972). Additionally, the court decided separately on the issue of the "technological arts". The court developed a "technological arts" analysis:

The "technological" or "useful" arts inquiry must focus on whether the claimed subject matter...is statutory, not on whether the product of the claimed subject matter...is statutory, not on whether the prior art which the claimed subject matter purports to replace...is statutory, and not on whether the claimed subject matter is presently perceived to be an improvement over the prior art, e.g., whether it "enhances" the operation of a machine. *In re Toma* at 857.

In *Toma*, the claimed invention was a computer program for translating a source human language (e.g., Russian) into a target human language (e.g., English). The court found that the claimed computer implemented process was within the

"technological art" because the claimed invention was an operation being performed by a computer within a computer.

The decision in *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* never addressed this prong of the test. In *State Street Bank & Trust Co.*, the court found that the "mathematical exception" using the Freeman-Walter-Abele test has little, if any, application to determining the presence of statutory subject matter but rather, statutory subject matter should be based on whether the operation produces a "useful, concrete and tangible result". See *State Street Bank & Trust Co.* at 1374. Furthermore, the court found that there was no "business method exception" since the court decisions that purported to create such exceptions were based on novelty or lack of enablement issues and not on statutory grounds. Therefore, the court held that "[w]hether the patent's claims are too broad to be patentable is not to be judged under §101, but rather under §§102, 103 and 112." See *State Street Bank & Trust Co.* at 1377. Both of these analysis goes towards whether the claimed invention is non-statutory because of the presence of an abstract idea. Indeed, *State Street* abolished the Freeman-Walter-Abele test used in *Toma*. However, *State Street* never addressed the second part of the analysis, i.e., the "technological arts" test established in *Toma* because the invention in *State Street* (i.e., a computerized system for determining the year-end income, expense, and capital gain or loss for the portfolio) was already determined to be within the technological arts under the *Toma* test. This dichotomy has been recently acknowledged by the Board of Patent Appeals and Interferences (BPAI) in affirming a

§101 rejection finding the claimed invention to be non-statutory. See *Ex parte Bowman*, 61 USPQ2d (BNA) 1669 (BdPatApp&Int 2001).

In the present application, Claims 1-15 have no connection to the technological arts. None of the steps indicate any connection to a computer or technology. Therefore, the claims are directed towards non-statutory subject matter. To overcome this rejection the Examiner recommends that Applicant amend the claims to better clarify which of the steps are being performed within the technological arts; for example: "computer is used to calculate average ..."

### ***Claim Objections***

2. Claim 8 is objected to because of the following informalities: abbreviations "P&L", "EBIT" and "EBITDA" are not spelled out in claim 8, specially "P&L" is even not defined in specification. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-9 and 17-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Apgar, IV (hereinafter Apgar - US 5,680,305).

Re. Claims 1 and 17, Apgar discloses systems and methods of the invention provide objective evaluations of a business entity's real estate situation and condition for use by customers including (but not limited to) the business entity [see entire document particularly Abstract; C1 L1 to C6 L67], inputting information into a means for processing the information wherein the information comprises financial data and non-financial data relating to the real estate asset [C1 L6-L50; C3 L36-L50; C15 L41 to C16-L20; C19 L20-L24], processing the financial data and the non-financial data into indicator values representing the financial data and the non-financial data [See Figures 19-21; C1 L 53 to C3 L14; C4 L1-L61; C13 L27 to C15 L23], evaluating the indicator values for the financial data and the non-financial data to get total scores for each financing structure [Abstract; Figure 21; C5 L20-L31], and outputting the total scores for each financing structure to compare the total scores for each financing structure [C21 L64 to C22 L19; C31 L14 to C32 L32].

Re. Claims 2, Apgar discloses assigning and applying weights to the indicator values that represent the importance of the financial data and the non-financial data for each financing structure [Figures 3, 5, 20; C8 L49 to C9 L5; C11 L17-L18; C17 L37-L67], and evaluating the weighted financial data and the non-financial data to get a total score of the financial data and the non-financial data for each financing structure [Abstract; Figures 20-21; C5 L20-L31].

Re. Claims 3, Apgar discloses wherein the financing structures comprise an ownership financing structure and a leasehold financing structure [C2 L62 to C3 L14; C22 L20 to C23 L59].

Re. Claims 4-6, Apgar discloses business entity ownership, small, large, bank, insurance, etc. (wherein the financing structures may be selected from the group consisting of: ownership using corporate funds, ownership with debt, a real estate investment trust, a partnership, a joint venture, a short-term lease, a long-term lease, a credit sale/leaseback, a tax-motivated leveraged lease, and a synthetic lease) [C3 L50 to C4 L24].

Re. Claim 7, Apgar discloses manipulating the financial data into performance metrics and assigning weights to the performance metrics to determine a financial data total score [Figure 14 # 382; C24 L58-L58; C31 L14 to C32 L32].

Re. Claim 8, Apgar discloses changes in capital markets structure lead to reevaluation of real estate investments, including interest rates, real estate supply and demand, and investment rates of return (wherein the financial data is selected from the group consisting of: a net present value after tax factor, an economic value-added factor, a total debt to capital factor, a capital requirement factor, a P&L cost impact factor, an EBIT interest coverage factor, an EBITDA interest coverage factor, a free cash flow to total debt factor, a funds from operations to total debt factor, a diluted EPS from

continuing operations factor, an operating profit/net sales factor, a return on assets factor, a return on equity factor, and a return on total capital factor) [C3 L35 to C4 L61].

Re. Claim 9, Apgar discloses square footage data representing square footage of the Real Estate (wherein the non-financial data is selected from the group consisting of; a strategic importance factor, a facility size factor, a replacement cost factor, a degree user specific factor, a market value/book value factor, a length of commitment factor, a certainty of occupancy factor, a flexibility factor, a market conformance factor, a size of market factor, a quality of market factor, and a rent/value trend factor) [C3 L35 to C4 L61].

Re. Claim 17, claim 17 is rejected with same rational as claim 1.

Re. Claim 18, claim 18 is rejected with same rational as claim 2.

Re. Claim 19, claim 19 is rejected with same rational as claims 4-6.

Re. Claim 20, claim 20 is rejected with same rational as claim 9.

#### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 10-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Apgar.

Re. Claims 10-15, Apgar does not explicitly disclose a) wherein the information relates to financial data of the entity desiring to procure the real estate asset, b) evaluating the entity desiring to procure the real estate asset (loan approval) and the real estate asset for the financial and the non-financial data, c) evaluating the real estate asset and the entity desiring to procure the real estate asset, and designing a model that processes the financial and the non-financial information into the indicator values, d) wherein the evaluation of the entity comprises reviewing documentation of the entity and interviewing personnel from within the entity, e) processing the financial factors into performance metrics of the entity desiring to procure the real estate asset, f) converting the financial information into standardized units prior to assigning the indicator values to the financial information, and g) performing a sensitivity analysis of performance metrics for each financing structure. However these are known steps in real estate dealing and real estate practice in other words: a) wherein the information relates to financial data of the entity desiring to procure the real estate asset (is a loan application; example Uniform Residential Form application form 1003), b) evaluating the entity desiring to procure the real estate asset (loan approval) and the real estate asset for the financial and the non-financial data (is property appraisal), c) evaluating the real estate asset and the entity desiring to procure the real estate asset, and designing a model that processes the financial and the non-financial information into the indicator values (are document preparation for underwriting), d) wherein the evaluation of the entity comprises reviewing documentation of the entity and interviewing personnel from within

the entity (is underwriting), e) processing the financial factors into performance metrics of the entity desiring to procure the real estate asset (is underwriting), f) converting the financial information into standardized units prior to assigning the indicator values to the financial information (is underwriting), and g) performing a sensitivity analysis of performance metrics for each financing structure (is underwriting). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the disclosure of Apgar and include steps a-g to provide evaluation method for real estate transaction such as leasing, rent, purchase, etc. which complies with modern real estate practice where different parties are involved.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Applicant is required under 37 CFR ' 1.111 (c) to consider the references fully when responding to this action.

*Fannie Mae Form 1003, Rev. 10/92 "Uniform Residential Loan Application" which shows mortgage type, terms, borrowers information, property information, etc. needed for real estate evaluation and transaction.*

*US 5,870,721 to Norris February 9, 1999 "System and method for real time loan approval" discloses a method and apparatus for closed loop, automatic processing a loan, including completion of the application, underwriting, and transferring funds, includes use of a programmed computer to interface with an applicant, obtain the information needed to process the loan, determine whether to approve the loan, and effect electronic fund transfers to the applicant's deposit account and arrange for*

*automatic withdrawals to repay the loan. Information is received from the applicant preferably by using voice recognition technology but alternatively by entering the alphanumeric information using a personal computer keyboard or using the buttons on a telephone. The loan approval determination is made using a neural network with input obtained in part from the applicant and in part from databases accessed by the computer, such as a credit bureau, to obtain a credit report.*

*US 5,689,650 to McClelland et al, November 18, 1997 "Community reinvestment act network" discloses financial systems and in particular to a network of data processes which may create diversified portfolios of eligible assets through which investors can earn market returns and obtain a cognizable interest in a particular asset in said portfolio while receiving the diversified risk benefits of a plurality of assets, determines whether an asset meets CRA qualifying parameters from demographic and statistical data regarding the borrower and/or the financial asset and determines whether a loan should be acquired.*

*US 5,414,621 to Hough, May 9, 1995 "System and method for computing a comparative value of real estate" discloses a system and method for determining comparative values of comparable properties based on assessment percentages and sales data of the comparable properties to ultimately determine a value for a subject property.*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Harish T Dass whose telephone number is 703-305-4694. The examiner can normally be reached on 8:00 AM to 4:50 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung S Sough can be reached on 703-308-0505. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Harish T Dass  
Examiner  
Art Unit 3628

Harish T Dass

11/17/04